

CLAIMS

WHAT IS CLAIMED IS:

1. A coupling comprising:

a first member having an axial end with an outer circumferential surface having an outer first diameter, a first interlocking member extending radially outward from the outer circumferential surface;

a second member having an axial end with an inner circumferential surface having an inner second diameter, a second interlocking member extending radially inward from the inner circumferential surface;

at least one of the first and second members including a keyway;

the outer circumferential surface insertable into the inner circumferential surface such that the first interlocking member is inserted past the second interlocking member, the first member and second member then being rotatable relative to one another to a locked angular orientation in which the first interlocking member is interlocked with the second interlocking member to prevent relative axial movement of the first member relative and the second member, a key being insertable into the keyway when the first and second members are in the locked angular orientation to prevent rotation of the first member and second member relative to one another.

2. The coupling of claim 1 wherein at least one of the first interlocking member and the second interlocking member is a portion of an L-shaped protrusion.

3. The coupling of claim 2 wherein the first interlocking member is a portion of an L-shaped protrusion from the outer circumferential surface and the second interlocking member is a portion of an L-shaped protrusion from the inner circumferential surface.

4. The coupling of claim 1 wherein the first interlocking member is one of a plurality of first interlocking members positioned radially outward from the outer circumferential surface of the first structural member and wherein the second interlocking member is one of a plurality of second interlocking members positioned radially inward from the inner circumferential surface of the second structural member.

5. The coupling of claim 4 wherein the at least one of the first and second members includes a plurality of the keyways into which a plurality of keys are insertable to prevent relative rotation of the first member and second member.

6. The coupling of claim 4 wherein the plurality of first interlocking members are circumferentially distributed along the outer circumferential surface and the plurality of second interlocking members are circumferentially distributed along the inner circumferential surface.

7. The coupling of claim 4 wherein the plurality of first interlocking members are axially spaced from one another on the outer circumferential surface and the plurality of second interlocking members are axially spaced from one another on the inner circumferential surface.

8. The coupling of claim 1 wherein the keyway is defined adjacent to and abuts at least of the first interlocking member and the second interlocking member to prevent relative rotation of the first and second members.

9. The coupling of claim 1 wherein the first member includes a body portion adjacent the axial end, the body portion having an outer diameter greater than the outer first diameter of the outer circumferential surface.

10. The coupling of claim 9 wherein the outer diameter of the body portion of the first member is substantially equal to and substantially aligned with an outer circumferential surface of the axial end of the second member.

11. The coupling of claim 1 wherein the axial end of the first member includes an axially outer annular surface and wherein the second member includes an annular shoulder surface axially inward of the second interlocking member, the outer annular surface of the first member abutting and forming a gas-tight seal against the annular shoulder surface of the second member when the first and second members are in the locked angular orientation.

12. The coupling of claim 1 wherein at least one of the first member and the second member further includes a stop member adjacent the interlocking member, the stop member abutting the interlocking member on the other of the first member and the

second member to limit relative rotation between the first member and the second member.

13. The coupling of claim 1 wherein the first interlocking member includes a dovetail that engages a complementary dovetail on the second interlocking member when the first and second members are in the locked angular orientation.

14. A method for connecting a first member to a second member including the steps of:

a) aligning radially outwardly extending first interlocking members on an outer circumference of an axial end of a first member between radially inwardly extending second interlocking members on an inner circumference of an axial end of a second member;

b) inserting the axial end of the first member into the axial end of the second member;

c) imparting relative rotation between the first member and second member until the first and second members are in a locked orientation in which the first interlocking members are interlocked with the second interlocking members; and

d) after said step c), inserting at least one key adjacent a portion of each of the first and second members to selectively prevent relative rotation between the first and second members.